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Discussing The Argumentativeness Scale

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Discussing the Argumentativeness Scale

(TITLE)

BY

Jacob A. Sweet

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
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Discussing the Argumentativeness Scale

Jacob A. Sweet

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Abstract

Studies have shown that people may associate the word “argue” on the argumentativeness scale with concepts associated with verbal aggressiveness, such as name calling or quarrels. The perceptions of the words used in the argumentativeness scale may result in considerable social desirability bias. A possible way of rectifying this problem involves the substitution of key words. This thesis reports three studies investigating participants’ perceptions of the word “argue” and its derivatives as well as synonyms for the word “argue.” Findings show that individuals tend to perceive the words “argue” and “argument” in a negative light. Substituting “discuss controversial issues” and “discussion about controversial issues” for “argue” and “argument” did result in increased argumentativeness scores for some participants.

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Chapter 1

Introduction

The argumentativeness scale and the verbal aggression scale have been among the most cited scales in the realm of communication research (McCroskey, Daly, Martin, & Beatty, 1998). They have been used in a wide variety of areas, including but not limited to organizational communication (Infante & Gorden, 1991), communication competence (Martin & Anderson, 1996) communication in romantic relationships (Venerable & Martin, 1997), and teacher-student communication (Myers, 2002; Myers & Knox, 2000). Argumentativeness is defined as “a generally stable trait which predisposes the individual in communication situations to advocate positions on controversial issues and to attack verbally the positions which other people take on these issues” (Infante & Rancer, 1982, p. 72). Verbal aggressiveness is defined as “the tendency to attack the self-concepts of individuals instead of, or in addition to, their positions on topics of communication” (Infante & Wigley, 1986, p. 61). These definitions are considered definitive and commonly used in all areas of research involving argumentativeness and verbal aggression (Rancer & Atvgis, 2006).

These concepts are both seen as communication traits (Infante & Rancer, 1982;

Infante & Wigley, 1986) meaning that they tend to be rather stable characteristics of individuals which greatly impacts their behavior and views. While both traits are a form of aggressive communication (Rancer & Avtgis, 2006), it is important to note that the target of the attack is different for each form of communication. As noted in the definitions, argumentative behavior targets the issues while verbally aggressive behavior targets a person's sense of self.

While the traits are distinct from one another, many people tend to confuse the two as several researchers have noted (Infante & Rancer, 1982; Infante & Wigley, 1986; Rancer & Avtgis, 2006). One reason for this confusion lies in the wording of the argumentativeness scale, specifically the use of the terms "argue," "argument," and "arguing." Several scholars (Dowling & Flint, 1990; Nicotera, 1996; Nicotera, Smilowitz, & Pearson, 1990) have noted that the connotations people may associate with those terms often do not fit the conceptualization of argumentativeness as laid out by Infante & Rancer (1982) in the original article on argumentativeness. More specifically, people often associate a verbal fight or name calling with the terms "argue," "argument," and "arguing." This is actually a form of verbal aggression. This is in contrast to an argument where the focus is on the issues (Dowling & Flint, 1990). Given that the interpretation of "argue" and its synonyms being associated with a fight or name calling greatly differs in meaning from that of an argument focused on issues, it is useful to examine both argumentativeness and verbal aggression. Additionally, since the concepts are often confused, a possible way to rectify this confusion about the items and wording of the argumentativeness scale is examined.

Both argumentativeness and verbal aggressiveness are forms of aggressive

communication (Martin & Anderson, 1996; Rancer, Kosberg, & Silvestri, 1992).

Aggressive communication is designed to attack, damage, and/or subdue the locus of an attack (Infante & Wigley, 1986). In the case of argumentativeness and verbal aggressiveness, we are referring to symbolic communication, such as words or gestures. This sets it apart from physical aggression which may consist of hitting, shoving, etc. Aggressive communication can be constructive or destructive (Rancer & Avtgis, 2006). Argumentativeness is generally seen as a constructive form of aggression (Infante & Rancer, 1982; Schullery, 1998). Being high in argumentativeness can grant a better understanding of conflict situations. Subordinates tend to have more satisfaction in a superior's job performance if the superior is high in argumentativeness and low in verbal aggression (Infante & Gorden, 1989). Venable and Martin (1997) found that high levels of self and partner verbal aggressiveness had a negative effect on the satisfaction of couples in a dating relationship.

The argumentativeness scale and verbal aggression scale both stemmed from a desire to take a deeper look at aggressive communication (Infante & Rancer, 1982; Infante & Wigley 1986). The argumentativeness scale was primarily conceived as a way of measuring a person's tendency to pursue or avoid an argument about controversial issues. By being able to measure a person's argumentativeness, researchers are better able to predict a person's behavior in argumentative situations (Infante & Rancer, 1982). Researchers can also predict a person's behavior in argumentative situations based on their responses on the verbal aggression instrument. Given that verbal aggression has been linked to physical violence, another reason for the development of the scale was to determine why some people have a tendency to be verbally aggressive and to identify

possible ways of reducing verbal aggression through argumentativeness training (Infante & Wigley, 1986).

Argumentativeness

Argumentativeness is generally seen in the communication field as a positive trait (Infante & Rancer, 1982; Infante & Wigley, 1986; Nicotera, 1996; Nicotera et al., 1990). It is a form of constructive aggressive communication (Rancer & Avtgis, 2006). Perhaps the most important thing to keep in mind about the argumentativeness trait is that it focuses on attacking the *issues* rather than the other person during an argument (Infante & Rancer, 1982). Instead of calling someone an “idiot” when the argument is occurring, the focus instead would be on explaining why that person’s position on a subject is incorrect or otherwise flawed.

The original argumentativeness scale measures the tendency of a person to approach an argument and the tendency to avoid an argument (Infante & Rancer, 1982). A copy of the scale can be found in Appendix A. The general trait of argumentativeness (ARG_{gt}) is measured as the tendency to approach an argument (ARG_{ap}) minus the tendency to avoid an argument (ARG_{av}) as measured using the argumentativeness scale, which has ten items measuring a respondent’s tendency to approach an argument and ten measuring their tendency to avoid an argument (Infante & Rancer, 1982). This may be more simply put as:

$$ARG_{gt} = ARG_{ap} - ARG_{av}$$

Research using the scale has shown that its internal consistency reliability is 0.91 (Infante & Rancer, 1982). Stability reliability was also measured by administering the scale to participants once at the beginning of the week and once at the end to see if

responses were consistent over time. The scores from this test-retest were compared and the correlation between time 1 and 2 for ARG_{ap} scores was .87. This supports the assumption that argumentativeness is a relatively stable trait. The correlation between time 1 and 2 for ARG_{av} was .86. Another study by Dowling and Flint (1990) found that the Cronbach alpha reliability coefficient for ARG_{ap} was .87 and the scores for ARG_{av} was .83. The results suggest the scales are internally consistent.

Since the conception of the argumentativeness scale, ways of measuring a person's argumentativeness have been expanded. There are now five different levels of argumentativeness based upon participants' scores in two dimensions, ARG_{ap} and ARG_{av}. People who are high in argumentativeness (Type 1) tend to enjoy arguing. They have high ARG_{ap} scores and low ARG_{av} scores. They may see it "as an exciting intellectual challenge" (Infante & Rancer, 1982, p. 72) and often get excited about the prospect of an argument and feel refreshed or energized after winning a point (Infante & Rancer, 1982). They are more willing to offer up numerous reasons to support their position in an argument and are seen as flexible in position. They are regarded as having more expertise and as being highly skilled (Infante, 1981).

At the other end of the argumentativeness spectrum are those who are low in argumentativeness (Type 2). They have low ARG_{ap} scores and high ARG_{av} scores. They tend to avoid arguments, having little confidence in their abilities. The very idea of an argument may cause them to become nervous (Infante & Rancer, 1982).

Rancer & Avtgis (2006) discuss three other types of argumentatives. The first type they add is conflicted-feelings moderate argumentatives (Type 3). These argumentatives score high in both ARG_{ap} and ARG_{av}. When they do argue, they tend to

be very emotional and try to only participate in those arguments that they are confident they will win.

Those who score low in both ARG_{ap} and ARG_{av} are labeled apathetic moderate argumentatives (Type 4). They express very little emotion when arguing and tend to argue only when it is practical to do so. If apathetic moderate argumentatives think they can win the argument they are much more likely to argue.

Finally, neutral moderate argumentatives (Type 5) have midrange scores on both ARG_{ap} and ARG_{av} . Like the Types 3 and 4, they tend to only argue when they are confident they can win (Rancer & Avtgis, 2006).

Argumentativeness has been studied in many areas of interpersonal communication including friendship (Semic & Canary, 1997), romantic (Venerable & Martin, 1997), and family relationships (Martin & Anderson, 1997; Rancer, Baukus, & Amato, 1986). With friendship, the argumentativeness trait was not found to correlate in any significant way with the development of arguments. The make-up of the dyad did affect the proportion of ideas developed through argument. Dyads that consisted of both individuals being highly argumentative tended to develop more arguments. This suggests that argumentative behavior is tempered by the argument situation and who a person is arguing with (Semic & Canary, 1997).

Argumentativeness has also been studied in organizational communication contexts. Infante and Gorden (1987) suggest that allowing argumentative behavior can result in a more productive organization. This is due to the fact that argumentativeness is constructive aggressive behavior and fits in with a culture that is individualistic in nature. Another study by Infante and Gorden (1989) found that supervisors preferred to have

employees who were high in argumentativeness. They were seen as more competent than employees who were low in argumentativeness.

In romantic relationships, argumentative behavior was not linked to relational satisfaction with dating partners. However, high self reports of argumentativeness were positively related to partner's levels of verbal aggression. This is to say that when one partner tended to report themselves as having high levels of argumentativeness their partner tended to have higher levels of verbal aggression. When it comes to marital satisfaction, marriages in which one partner was high in argumentativeness and the other was low resulted in greater marital satisfaction than marriages where both partners were roughly equal in argumentativeness.

In a study of families with young adult children, mother and daughter levels of argumentativeness were found to be positively correlated while no such relationship was found between father and son levels of argumentativeness (Martin & Anderson, 1997). This may be due to the socialization that daughters go through with their mothers. It is possible that females responding on the argumentativeness scale may be thinking of personal argument situations and males may be thinking of public argument situations (Johnson, Becker, Wigley, Haigh, & Craig, 2007). Females may be less likely to argue in a personal situation due to the relational damage it may cause. It is possible that if the perceived context of the argument changed scores on the argumentativeness scale would be different.

Overall these studies indicate that argumentativeness is generally seen as a positive trait in many situations. However, some people may interpret the scale as having to do with relational situations while others see it dealing with public situations. The type

of situation perceived can have an impact on the participant's score. For example, an individual may be more likely to engage in argumentative behavior in a business meeting to further their point than with his spouse, due different perceived outcomes. This is something that warrants further study.

Verbal Aggression

Verbal aggressiveness has also been studied in depth by scholars. Verbal aggression involves any symbolic attack on another person or their self concept and is generally seen as a negative trait (Rancer & Avtgis, 2006). This distinguishes verbal aggression from argumentativeness which focuses solely on ideas, arguments, and/or the position a person has on a subject and does not use personal attacks. There are many different forms of verbal aggression. It normally consists of insults, threats, or profanity and nonverbal behaviors, such as flipping the bird, angrily pointing a finger or shaking one's fist at another person (Infante & Wigley, 1986).

While the two traits are distinct from one another (Infante & Rancer, 1982; Infante & Wigley, 1986), they are often studied together (Johnson, et al., 2007; Martin & Anderson, 1996; Martin & Anderson, 1997; Rancer, Baukus, & Amato, 1986; Semic & Canary, 1997). This has led to some similar correlations between argumentativeness and verbal aggression being found, as well as radically different ones, or in some cases none at all (Rancer & Avtgis, 2006). Sadly enough, links have also been found between verbal aggressiveness and physical violence (Infante & Wigley, 1986; Sabourin, Infante, & Rudd, 1993; Infante, Sabourin, Rudd, & Shannon, 1990). Couples with a high degree of verbal aggression are more likely to engage in physical violence as well.

More recent research on verbal aggression has begun to explore indirect verbal

aggressiveness. This behavior includes such tactics as spreading rumors or excluding the target from a group (Beatty, Valencic, Rudd, & Dobos, 1999). These types of actions can seriously damage a person's reputation and cost them opportunities both professionally and privately. Crothers, Field, and Kolbert (2005) extend this research and note that indirect aggression can include stealing romantic partners.

Both indirect and direct verbal aggression can have a long lasting impact, potentially doing more harm than physical aggression (Beatty, Valencic, Rudd, & Dobos, 1999). Verbal aggression is even more harmful when the target perceives their aggressor as being a friend or someone the target has an intimate relationship with. For example, Segrin and Fitzpatrick (1992) found that depression in husbands was correlated with their wife's verbal aggressiveness level.

Verbal aggression also impacts perceptions of a person, even over email. Martin, Heisel, and Velenci (2001) found that when subjects received several emails from a verbally aggressive person, the subjects tended to rate the person as less socially desirable. However, the level of aggressiveness displayed by the person over email had no impact on the receiver's feelings about the subject being discussed.

There has also been a lot of attention paid to verbal aggression in the media. The idea of "Monkey see, Monkey do" may have much to do with the amount of attention given to the subject. There is no doubt that verbal aggression is displayed in television shows and the movies. One can see examples of this on popular programming such as *Family Guy*, *WWE Raw*, *Scrubs*, *My Name is Earl*, and even children's cartoons such as *Looney Tunes*. Martin, Weber, and Mottet (2003) have linked cultivation theory to verbal aggressiveness. Essentially, people who are heavy viewers of television tend to be more

verbally aggressive. However, while scholars have linked watching sitcoms to increased levels of verbal aggressiveness against those who criticize the shows, after repeated exposure to a sitcom, viewers tended to be less verbally aggressive towards the sitcom itself (Chory-Assad & Tamborini, 2004).

Cicchirillo and Cory-Assad (2005) have also successfully linked video game use to verbal aggressiveness. They have pointed out that not only are the individuals playing the game often exposed to verbal aggression from the game, they are also enacting physical aggression as well. The more videogames were played, the higher the level of verbal aggressiveness in study participants. This held true for both male and females.

Considered together, these studies strongly support the idea that verbal aggression is seen as a negative trait. While it is commonly believed to be a direct mode of aggression, it can also take an indirect form (Beatty, Valencic, Rudd, & Dobos, 1999). Many things can influence a person's levels of verbal aggression including watching television and playing video games.

Social Desirability Bias

Given that both scales have been used extensively in communication research, it should come as no surprise that both have come under fire numerous times for their psychometric properties. The issues that most frequently are raised include concerns that are common with any self-report measures (Chen, 1994; Dowling & Flint, 1990; Nicotera, 1996; Rancer & Avtgis 2006). Specifically, the argumentativeness scale has had questions raised about its phrasing (Dowling & Flint 1990) and validity. While few doubt the face validity, one of the main concerns is construct validity. There is still confusion about what is meant by "argue," "arguing," and "argument" on the

argumentativeness scale. People may not be associating the terms with attacks on issues but instead they may be associating them with attacks on a person's self-concept (Dowling & Flint, 1990). This suggests that individuals completing the argumentativeness scale may be thinking of a quarrel or verbal fight when they read "argue," "arguing," and "argument" (Dowling & Flint, 1990; Nicotera et al., 1990). This would mean that the scale is measuring the verbal aggression trait and not the argumentativeness trait.

While this concern is somewhat moderated by so many studies including both scales and finding separate results, researchers have offered suggestions for helping respondents interpret the scale items. For example, Dowling and Flint (1990) suggest the researcher should try to emphasize that arguing is over controversial issues. However, most people have seen arguments regarding controversial issues quickly descend into the realm of verbal aggression on at least one occasion. If, in fact, the average person completing the argumentativeness is thinking of a quarrel or verbal fight, then the scale itself may not be as valid as previously thought (Dowling & Flint, 1990). Given that the verbal aggression scale includes items specifically describing personal attacks (Infante & Wigley, 1986), the confusion is more likely to occur when the verbal aggression scale is not included with the argumentativeness scale.

There are also concerns that it may be susceptible to social desirability bias (Nicotera, 1996; Nicotera et. al. 1990; Chen 1994), something which may result in inaccurate self reporting as subjects may report in ways contrary to their actual behavior or desires in order to present themselves in a better light (Crowne & Marlowe, 1964; Smith & Ellingson, 2002; Strahan & Gerbasi, 1972). This bias can seriously skew the

results of any test that relies on self reporting.

Chen (1994) showed that individuals scoring high in social desirability scored significantly lower on the argumentativeness scale than individuals scoring low on the social desirability scale. Nicotera (1996) likewise found that individuals rating low on argumentativeness judged items on the scale as being low in social desirability.

Females and the Argumentativeness Scale

It has been suggested that women may be more susceptible to social desirability bias than men (Nicotera, 1996). Nicotera (1996) suggests this stems from the added pressure that many females receive to be relationally-focused. While argumentativeness is seen as a constructive form of aggressive communication, there may be an underlying assumption that all aggressive communication may be destructive to relationships. Even the most issue-focused attack can still offend someone and cause relational damage. Additionally, in many cases females are heavily socialized to conform to what others want and expect out of them (Nicotera, 1996). This is supported by the correlation found by Martin and Anderson (1997) between mothers' and daughters' levels of argumentativeness. If mothers view arguments as being not socially desirable, their daughters are likely to view them that way as well.

It has been shown that women do tend to be less argumentative than men (Schullery, 1998; Schullery & Schullery, 2002). While argumentativeness is an assertive communication trait, assertiveness by females is not always perceived as a good quality by males and thus it may not be displayed as often in mixed company. The type of argument can also influence argumentative behavior shown (Johnson et al., 2007). Females were more likely to report a higher tendency to avoid arguments in a personal

argument situation lending credence to the idea that women are more likely to avoid arguments due to the relational damage it can cause (Johnson, et al., 2007).

Wording and the Argumentativeness Scale

It is possible that the use of the word “argue” may be responsible for both the confusion between argumentativeness and verbal aggression as well as the possible social desirability bias. While not the focus of the study, anecdotal evidence reported by Nicotera et al. (1990) indicated that many respondents took exception to the use of “argue” and added comments to the scale stating, “I don't argue, I discuss!” While the argumentativeness scale treats “argue” as meaning a discussion of opinions on a controversial issue or issues, many may see it as a form of verbal aggression similar to what occurs in a quarrel. Indeed, *The American Heritage® Dictionary of the English Language* (Argument, n.d.) lists one of the definitions of “argument” as, “a quarrel; a dispute.”

Nicotera (1996, p. 31) shows that the item rated highest in social desirability on the argumentativeness scale, “I enjoy defending my point of view on an issue,” doesn't include the word “argument” or any variants of it. This lends further credence to the idea that removing “argument” and its variants from the scale and replacing them with a different word may also create a change in the perception of social desirability for the scale items. Replacing words could result in a reduced social desirability bias.

In one attempt to reword the scale Dowling and Flint (1990) created three alternative versions of the argumentativeness scale. Using these three scales and the original, they came to the tentative conclusion that the scale dubbed MENTISS was best suited to measuring argumentativeness. This scale replaced the terms “arguing” and

“argue” with “argument” and made sure that the phrase “controversial issues” was included in each item. For example, item number 3 on the argumentativeness scale states “I enjoy avoiding arguments.” On the modified MENTISS scale this item states “I enjoy avoiding arguments about controversial issues.” However, this study did not include a social desirability bias test so it is unknown if the rephrasing of the scale reduced the social desirability bias that may have influenced responses on the original scale.

In another attempt at rewording the scale, an unpublished study by Sweet (2006) substituted the word “debate” for “argue” and “argument.” Additionally, “debating” was substituted in place of “arguing.” For example, item 3 states “I enjoy avoiding debates.” Item 4 states “I am energetic and enthusiastic when I debate.” *The American Heritage® Dictionary of the English Language* (Debate, n.d.) notes that the definition of debate as, “a quarrel; a dispute” is obsolete. Sweet’s (2006) study was an attempt to heed Nicotera’s (1996) caution to make sure that respondents know “argue” and its variants are being used to refer to a discussion about controversial issues and not referring to a quarrel. A paired t-test on the sample population ($n = 137$) revealed that people do in fact tend to score higher on the modified argumentativeness scale than the original, supporting a conclusion that people respond differently based on the language choice between “debate” and “argument” ($t = 2.678, p < .01$). However, the mean increase between the scores on the original instrument and the scores on the modified instrument was rather small, being only 1.47 points. Additionally, 36% of the sample group scored lower on the modified argumentative scale than on the original and 12% had no change in their scores. While the study was unable to give an explanation for the varied changes in scores due to a lack of questions about the perceptions of terminology, there are several

possibilities.

One possibility for the increased scores for some participants and the decreased score for others is that the word “debate” has more formal undertones. Given that the term “debate” is often used to refer to structured communication in formal settings, people may have interpreted the modified scale to be asking about how they feel in a formal debate setting. Even if people are willing to argue with friends, they may not enjoy being a part of a formal debate and may in fact possess a fear of public speaking that would make them less likely to engage in a public debate than participate in an argument with friends. This is backed up by the findings of Johnson et al. (2007) that demonstrate argumentative scores differ based on the situation.

Another possibility for why the scores may have changed so slightly is the fact that while the word “debate” may be seen as more socially desirable than the word “argue”, it may not be seen as much more socially desirable. Pearce and Littlejohn (1997) note that in our culture, “conflict is treated traditionally as a necessary evil” (p. 30). Both are still forms of conflict and thus both may be deemed as necessary evils. That is to say, while debating is more acceptable, it is still a behavior that may be considered at best as a last resort and as such is only slightly more acceptable than arguing.

The final possibility regarding the minor shift in scores is that there is nothing in the replacement of the word “argument” with the word “debate” that results in a change of the perceived social desirability of the action. The study itself had only one respondent that scored high in social desirability bias and thus the researcher was unable to reliably test for a change in those possessing high social desirability needs. The shift in

responses may be entirely due to some other connection respondents are making with the word “debate” and its variants. This possibility is still compatible with much of the reasoning presented above for the smaller shift but opens the door for more research on what the difference in perception is.

Rational for Research

This investigation is designed to further explore the participants’ perceptions of the words associated with the argumentativeness scale and possible alternatives. It is possible that over time the connotations attached to words in scales can change. The change in connotations could affect the validity of the scales as they may no longer measure what they were intended to measure. For this reason it is important that researchers periodically revisit scales to check for changes in perceptions of the words that comprise them.

One of the guiding factors in possible alternative word choices is that they all pertain to a discussion about controversial issues. In order to examine words that could be substituted in the scale and more clearly understand how people interpret words associated with “argue,” three studies were conducted with study two building on the results of study one and study three building on the results of studies one and two. Specifically, study one asks participants for additional words to describe “a discussion about controversial issues.” These words were then used to generate additional stimulus concepts for study two. Participants’ perceptions of stimulus concepts in studies one and two then guided the selection of word choices for the modified argumentativeness scale in study three.

The first study examines how participants interpret certain synonyms for “argue,”

in addition to having participants generate a list of words meaning a discussion about controversial issues. This list of words was then used to generate the concept words used for the second study. This is important because it gives a clearer understanding of which words may be more likely to be associated with verbal aggression than argumentativeness. It will also show if participants find some words or the actions associated with them to be socially undesirable based on the words used to describe the possible alternative choices. Finally, by having participants generate a list of words meaning "a discussion about controversial issues" we can reduce researcher bias in the choice of wording for the possible alternative argumentativeness scale(s).

The second study uses semantic differential scales to examine several dimensions of the synonyms. These synonyms were generated from the first study. This is important because it provides us with quantitative data to use in conjunction with the qualitative data that was generated by the first study. Measuring the dimensions specifically will likely produce a somewhat clearer picture of how people interpret possible word choices and demonstrate similarities and differences among the synonyms.

The third study involves the construction of a variant argumentativeness scale using the findings of the first two studies. It uses the Strahan-Gerbasi (1972) shortened-form social desirability scale to see if social desirability bias results in a change of scores between the argumentativeness scale and the modified version(s). Using the scale also allows us to research the idea that females are rated higher in social desirability bias than men.

Considered together, these three studies are important because they will contribute to our understanding of the participant perceptions of the argumentativeness scale. A

strength of this series of studies is that it permits both qualitative and quantitative examinations of word choices for substitution in the argumentativeness scales. Given that it has been 26 years since the initial development of the argumentativeness scale, it is important to revisit the scale in order to establish that the meanings of have remained stable over the course of time.

Chapter 2

Study 1

Perhaps the most compelling need for future research on the argumentativeness scale and how possible confusion with scale concepts may impact both what a participant perceives the scale as measuring and social desirability bias is illustrated by how people interpret words associated with “argue.” The connotations attached to the term “argue” and its derivatives may have changed over time since the scale was originally developed. The difference may not be as simple as people associating “argument” with concepts related to both argumentativeness and verbal aggression while associating “debate” only with concepts related to argumentativeness. There may be numerous other ways in which people perceive the terms to be different.

This study examines how participants interpret certain synonyms for “argue,” in addition to having participants generate a list of words meaning “a discussion about controversial issues.” This is important because it grants a clearer understanding of which words may be more likely to be associated with verbal aggression than argumentativeness. It also shows if participants find some words or the actions associated with them to be socially undesirable based on the words used to describe the possible alternative choices. Since scores on the argumentativeness scale can be affected by sex or training (Rancer & Avtgis, 2006) this study also examines the perceptions of the stimulus words based on sex and argumentativeness training. It is with this in mind that the following research questions are proposed.

RQ1: What words do people use to define a discussion about controversial issues?

RQ2: What are the connotations associated with the word “argue”?

RQ3: What are the connotations associated with the word “argument”?

RQ4: What are the connotations associated with the word “debate”?

RQ5: What are the connotations associated with the word “discuss”?

Methods

Sample. Participants were drawn from sections of an introductory level communication class at a medium sized Midwestern university. This resulted in a sample size of 40, containing 13 males (32.5%) and 27 females (67.5%). About 10% ($n = 4$) of the participants had experienced some form of argumentativeness training in the past either in a class or as a member of a forensics or debate team.

Materials. Four concepts related to “argue” were identified and used. The concepts used were: “debate,” “argue,” “discuss,” and “argument.” Participants were asked what each concept meant to them. They were also asked what words they would use to describe “a discussion about controversial issues.” Finally they completed a short demographic section that covered sex and if they had argumentativeness training. A copy of the instrument can be found in Appendix B.

Procedures. The research was conducted in a classroom setting. Participants received the packet containing the informed consent form, cover page with directions on how to complete the instrument, a copy of the instrument, and a page of questions pertaining to demographics.

The researcher explained the purpose of the study, went over the consent form, and directed participants on how to complete the instrument. The administration took about 15-20 minutes.

Coding. Two coders were trained to classify participant responses according to

the category scheme by (Rancer, Baukus, & Infante, 1985). They identified these categories based on participants' comments about their beliefs on arguing.

- 1) Hostility- Arguing is viewed as combative and aggressive
- 2) Activity/process- Arguing is viewed as a method of social interaction
- 3) Control/dominance- Arguing is viewed as a method of establishing power
- 4) Conflict/dissonance- Arguing is viewed as a source of conflict
- 5) Self-image- Arguing is viewed as an encounter that directly impacts a person's sense of self
- 6) Learning- Arguing is viewed as a means or a way to gather or seek information
- 7) Skill- Arguing is viewed as a method of testing or indicating a person's verbal and rhetorical skills
- 8) Subjective Evaluation- Beliefs about arguing that don't fit into the other categories (i.e., Not codeable)

In addition to these eight categories, coders also classified responses as being a positive belief, negative belief, or neutral. Categorization of positive responses was considered a subjective judgment by the coders and depended on whether they say the words used to describe the stimulus concept as carrying an overall positive connotation or if they believed that the participants meant the statement to characterize a positive aspect of the stimulus concept. Categorization of negative responses depended on if the coder felt the words used to describe the stimulus concept carried a negative connotation or that the participant meant the statement to characterize a negative aspect of the stimulus concept. Responses were categorized as neutral if they failed to meet the criteria for either positive or negative classification.

Coders were given sample responses and given instructions on how they would code those items. Initial coding had a kappa of .66 for categories and .64 for valence of responses. Both coders then met together with the researcher and agreed on categories and valence for responses where there was disagreement.

Results

Male participants without argumentativeness training ($n = 12$) only gave responses that were categorized as negative beliefs about three concepts of the five concepts, "argue," "argument," and "discussion about controversial issues." Of those three, "argument" had the highest percentage of negative responses with 42.9% of the responses classified as a negative belief. Some examples of responses to the stimulus word "argument" that were negative include "conflict," "fight," "loud," and "loud confrontational debate about a controversial issue."

"Discussion about controversial issues" was next with 27.4% followed by "argue" which had 23.1% of responses classified as negative beliefs. Some examples of negative responses males without argumentativeness training gave to "discussion about controversial issues" are "Controversial issues tend to involve words that are either vulgar or associated with vulgarity," "sometimes vicious mudslinging," "biased," "uncomfortable," fist fight," and "abusive." Participants responded to the stimulus word "argue" with the following statements that were categorized as negative, "conflict," "a chance to debate two conflicting sides to talk it out," and "when two or more people don't see eye-to-eye in a conversation."

It should be noted that "discussion about controversial issues" had the highest number of responses with 62 total responses generated and coded. The other concepts

“argue,” “argument,” “debate,” and “discuss” had only 13-14 responses generated and coded. Neither “debate” nor “discuss” had any responses by males that were classified as negative.

Female participants without argumentativeness training ($n = 24$) only gave responses that were categorized as negative beliefs about the same three concepts as males: “argue,” “argument,” and “discussion about controversial issues.” Of those three, “argue” had the highest percentage of negative response with 41.2%. Some responses by females without argumentativeness training that were categorized as negative include “difference of opinions –only more so- with anger,” “sharp words spoken to a person for any number of reasons,” “mainly to fight,” “use angry words” “bickering,” and “two different viewpoints discussed in a manner which is uncivil.”

“Argument” had the next highest percentage of responses coded as negative with 37% followed by “discussion about controversial issues with 29.9% of responses to that concept classified as negative. Response by females without argumentativeness training to the word “argument” that were classified as negative include, “disagree and get really into the topic and probably get angry during the argument,” “an argument is a debate gone wrong,” “a disagreement when 2 or more people don’t see eye to eye so they feel it is necessary to prove to the opposing party that they are right in a loud sometimes obnoxious manner,” “a fight with words” and “to disagree to an extent that a person is too upset to try and resolve it right way.”

Some examples of responses by females without argumentativeness training to “a discussion about controversial issues that were categorized as negative include “people arguing and getting angry with one another,” “frustration,” “risky,” “collateral damage,”

“hard,” “stressful,” “unjustified,” “ignorance,” “traumatizing,” “people arguing and getting angry with one another,” and “hurtful.” Again there were a disproportionate amount of responses to “discussion about controversial issues” with 87 responses generated and coded while the concepts had a number of responses ranging from 26-34 that were generated and coded.

For participants with argumentativeness training ($n = 4$) the trend continued similar to those without. Again only three concepts had responses that were classified as negative beliefs; “argue,” “argument,” and “discussion about controversial issues.” “Argument” had the highest percentage of negative beliefs with 100% of responses classified as negative including these responses “I think of an argument more as a fight,” “yell and I get emotional,” “to come into verbal or physical conflict with another person,” and “for people to have a not very nice conversation about their opinions.”

“Argue” followed with 50%. The following two responses were categorized as negative beliefs, “to debate but with more anger and winning an argument usually doesn’t accomplish much” and “to use one’s rhetoric to further a point while in conflict with another person.” “Discussion about controversial issues” was last with 20%. Only one response was categorized as negative and it was “conflictual emotional argumentative.” In this case there were four to six responses generated and coded for all concepts.

These results partially answer research questions 2 & 3: what are the connotations associated with the word “argue” and what are the connotations associated with the word “argument.” It also aids in answering research question 1: what words do people use to define a “discussion about controversial issues.” This shows that at least some of the connotations attached to “argue” and “argument” are negative and that some

of the words used to describe a "discussion about controversial issues" are negative.

Some of the negativity seems centered on the fact that there is conflict involved in these activities.

Other synonyms describing a "discussion about controversial issues" were "debate," "argument," "forum," "debating," "conflict," "differences," "meeting," "rally," "interviews," "argumentative," "conflict," "arguing," "disagreeing," "disagreement," "talking," "argue," "discuss," "review," "fist fight," "conversation," "discussion," "arguments," "discussion," "debating," "dispute" and "arguments." There were also many words used that describe what sort of words are used in such a discussion including "pros," "cons," "morality," "politics," and "religion."

Some people expressed their enjoyment of such a discussion with males without argumentativeness training having 9.7% of their responses categorized as positive beliefs about a discussion. Here are examples of some of the responses that were categorized as positive: "I like having discussions about controversial issues," "entertaining," "thrilling," "important," and "logical."

Females without argumentativeness training were more favorable towards such an activity with 17.2% of their responses categorized as positive. The following are examples of responses that were categorized as positive beliefs, "controversial issues help you understand people's views on a problem or discussion," "informational," "listening," "believing in what you stand for," "educate others," and "interesting."

Those with argumentativeness training had 40% of their responses to "a discussion about controversial issues" categorized as positive including the following responses "essential, is helping people develop opinions and examine issues from

different points of view” and “something I enjoy and any discussion about the above topics (abortion homosexual, republican, democrat, stem cell research, cloning) would be fine with me.” This further lends credence to the idea that argumentativeness training affects how likely people are to view argumentative behavior as positive (Infante & Rancer, 1982; Dowling & Flint, 1990, Rancer & Avtgis, 2006).

To further explore research question 2: what are the connotations associated with the word “argue,” it is necessary to examine what the responses to the word “argue” were categorized as. About 30.8% of the 13 responses by males without argumentativeness training were classified as belief about “argue” as a source of conflict/dissonance. Rancer, Baukus, & Infante, (1985) define this as “arguing perceived as a source of social conflict or dissonance among or between antagonists” (p. 40). As previously discussed, most conflict is seen as negative in our culture (Pearce & Littlejohn, 1997). Some examples of responses that were classified as conflict/dissonance include “when two or more people don’t see eye-to-eye in a conversation,” “conflict,” and “to converse in issues to which two separate parties disagree on.” No responses to “argue” by males without argumentativeness training were categorized as positive and the responses that weren’t categorized as beliefs about “argue” as a source of conflict/dissonance were put into the subjective evaluation category as they didn’t fit into any of the other categories laid out by Rancer, Baukus, & Infante (1985). This totaled 69.2% of the responses. Some examples of these responses are “to engage in a discussion where one or more people are attempting to propose an idea that is contrary to the others opinions involves where in the proposer’s idea (sic) are being countered,” “in its simplest form to offer up a different opinion,” and “conversing over a certain items that you have a different opinion

on.”

Females without argumentativeness training also saw “argue” as a source of conflict/dissonance with 32.4% of the 34 responses being classified as such. Some examples of these responses include “when two or more people have a disagreement on a topic and they “discuss” their different views somewhat heatedly,” “putting your ideas and thoughts against another person,” “dispute over an issue,” and “to disagree with someone on a certain topic.”

They also saw the concept “argue” as associated with hostility as 29.4% of their responses to the concept were categorized as beliefs about “argue” as a form of hostility defined by Rancer, Baukus, & Infante (1985) as “Arguing perceived as a combative and aggressive encounter” (p. 40.). Some examples of responses categorized as a belief in “argue” as a form of hostility include, “fight,” “to fight,” “to strongly discuss differences in opinion oftentimes angrily,” and “sharp words spoken to a person for any number of reasons.”

About 11.8% of the responses saw “argue” as being associated with control/dominance defined by Rancer, Baukus, & Infante (1985) as “Arguing perceived as a means of establishing, enforcing, or maintaining power; arguing perceived as a way of having one’s opinions prevail” (p. 40). Some examples of these responses include, “try to prove your point and make people take your side,” “proving a point,” and “to try to get someone to see your point of view or to agree with you.”

Only one response (2.9%) was associated with “argue” as being an activity/process defined by Rancer, Baukus, & Infante (1985) as “Arguing perceived as a mode of social interaction” (p. 40). This response was “to go back and forth with

words.” There was also one response (2.9%) that associated “argue” with learning, defined by Rancer, Baukus, & Infante (1985) as “Arguing perceived as a way to gather or convey information about oneself, others, or the environment” (p. 40). This response “Argue is to try and get another person to see my side as well as theirs” was the only response that was categorized as a positive belief about the concept “argue” by females without argumentativeness training.

For those with argumentative training the categories were evenly split. There were only four responses and each one was placed in a different category. One, “to debate but with more anger and winning an argument usually doesn’t accomplish much,” was categorized as a belief in “argue” as a form of hostility. One, “for two or more people who have strong opinions to have a deep conversation sticking up for their views,” was categorized as a belief in “argue” as a part of control/dominance. One, “to use one’s rhetoric to further a point while in conflict with another person,” was categorized as a belief in “argue” as a form of conflict/dissonance. Finally, “to disagree” was categorized in the subjective evaluation category. No responses by those with argumentativeness training were classified as positive.

Research question 3 asks, “what are the connotations associated with the word “argument?”” Males without argumentativeness training had 28.6% of their 14 responses categorized as activity/process, including, “a time in two or more people’s lives where their views on something have been rejected by another person’s opinion, “it is a generic term for conversation held by those of different opinions,” and “two or more people heatedly talking about opposing viewpoints.”

About 21.4% classified as belief in “argument” as a form of conflict/dissonance

including, "conflict," "loud confrontational debate about a controversial issue," and "past tense of two or more people not seeing eye-to-eye in a conversation." About 14.3% of responses were categorized as a belief in "argument" as a form of hostility and included these responses "fight," and "loud." One (7.1%) responses "a discussion where at least one person is expressing their views on an issue and is not open to any other suggestion" was categorized as viewing "argument" as a means of establishing control/dominance, and 28.6% of responses were classified as belonging to the subjective evaluation category. These responses include "disagreement that involves many people" "argument is where you argue," and "a time when you have the chance to argue with other people." Only one response, "a discussion in which two or more people discuss their feelings about a subject in an emotional way," was categorized as positive.

Females without argumentativeness training largely responded to "argument" with beliefs classified as belonging to the hostility category with 29.6% of the 27 responses being categorized as such including, "to disagree to an extent that a person is too upset to try and resolve it right way, "a fight with words," and "disagree and get really into the topic and probably get angry during the argument." About 18.5% were categorized as belonging in the conflict/dissonance category including "heated discussion between two people caused by a problem that has arisen, "when two or more people do not agree and dispute it," and "an issue between people that they disagree on."

This was followed by 14.8% of responses belonging to the control/dominance category which included the following responses: "two or more people using facts or opinions to prove their point," "the process in which to get the other person to see someone else's views," and "heated discussion to prove one's beliefs are more correct

than another's." Two responses (7.4%), "the talk about the issues you had with someone or about something," and "argument means having a discussion that includes two or more people" were categorized into the activity/process category and 29.6% were categorized as subjective evaluation. No responses were categorized as positive beliefs.

Those with argumentativeness training saw "argument" as a form of hostility with 66.7% of their six responses being coded into the hostility category. Some of these responses include "I think of an argument more as a fight" and "to come into verbal or physical conflict with another person." One response (16.7%), "for people to have a not very nice conversation about their opinions," was categorized as activity/process and one response (16.7%), "get into a discussion in which people cannot come to an agreement" was categorized as conflict/dissonance. All responses were categorized as negative beliefs about the concept "argument."

Research question 4 asks, "what are the connotations associated with the word 'debate?'" Males without argumentativeness training had 28.6% of their 14 responses to the concept "debate" categorized as belonging to control/dominance. Some of the responses categorized that way included, "commonly political that may be a competition," "discussion in which people are expressing their view to see which person has the better view," and "is when two or more people try to convince others their ideas are better than someone else's"

Other responses were categorized as a belief in "debate" as a form of activity/process (21.4%) such as "to converse over a certain matter," and "hearing two sides of an argument between two people." The learning category had two responses (14.3%), "an intellectual and monitored argument" and "educated discussion." One

response (7.1%), "Is similar to an argument in that there are multiple opposing views. However, a debate is typically a discussion, done for sport or leisure in which the parties involved not only push their point but who draw from their opponents argument," was categorized as conflict dissonance.

About 28.6% of responses were categorized as subjective evaluation including "a formal exchange of views," "a more formal setting in which an argument is monitored as not to get out of hand," and "A more dignified term for "argument" often utilizing a "neutral" party as a moderator to keep the argument civilized." Here the idea of a debate being a formal, moderate affair can be seen. This may make the term "debate" unsuitable for use in the modified argumentativeness scale. Approximately 35.7% of the responses were categorized as positive including "a more calm form of discussion," and "educated discussion." No responses were categorized as negative.

Females without argumentativeness training had 25% of their 28 responses classified as belonging to the activity/process category. Some examples of those responses are, "discuss differences of opinions in a non-confrontational way," "discussion between two or more people on a topic," "discussion between two or more people on a topic," and "to discuss an issue." Another 25% were categorized as control/dominance including "to have one or more opinions on a matter then give reasons to support what your side of the debate is on," "to persuade someone," "debate means saying each side of an issues and trying to present your side with facts" and "a question or topic that has 2 or more different viewpoints and people pick one of those sides and go back and forth to prove their point " The conflict/dissonance category had two responses (7.1%), "talk over a topic in a formal non aggressive way show both/multiple views on a

certain topic” and “where one side is against another supporting or disagreeing with an idea.”

One response was categorized as hostility, “facts fought with facts on issues.” One response was categorized as learning, “less aggressive and more informational.” There were 35.7% of the responses categorized as subjective evaluation including the following responses, “same as argument just a little more formal and without the parties getting frazzled and yelling,” “to make as many points in your speech that are undeniably good points and being able to listen to your opponents points and come back with something better,” and “an organized disagreement of stances on certain controversial issues.” Again the formalized interpretation of the term “debate” can be seen. There were no responses categorized as negative beliefs about the concept “debate” and 28.6% of responses were categorized as positive including “is a lighter form of discussions in which both parties are still passionate but respectful of each others viewpoints” and “talk over a topic in a formal non aggressive way show both/multiple views on a certain topic.”

Those with argumentativeness training gave six responses to the concept “debate.” Of those responses 50% were categorized as belonging to control/dominance including “respond and defend their position,” “to use one’s rhetoric to further their case against their opponent and win,” and “for people to have specific facts as to why they’re right and why people should choose their side.” One response (16.7%), “to examine and discuss all/both sides of an issue” was classified as activity/process, and 33.3% were classified as subjective evaluation. Again there were no responses coded as negative beliefs. Two responses (33.3%), “is more calm” and “like an argument but both sides are given equal opportunity to speak” were coded as positive beliefs and both were

considered subjective evaluation.

Research question 5 asks, "what are the connotations associated with the word "discuss?"" Males without argumentativeness training had responses to discuss that were mostly categorized as an activity/process with 53.8% of the 13 responses being categorized as such including, "a talk with many participants in a relaxed and informal setting," "a talk without raising the bass in your voice," and "a chance to talk about things in depth." Two responses, "to share your views with others" and "to talk about an idea to better explain it," were categorized as learning (15.4%). Conflict/dissonance had one response (7.7%), "a conversation in which 2 or more people are openly sharing views on a certain issue in hopes to obtain an answer or solution," in its category. Self-image, defined by Rancer, Baukus, & Infante (1985) as "Arguing perceived as a communication encounter which overtly impacts on the self-concept of the participants" (p. 40) also had one (7.7%) response, "involve my own opinions". There were two (15.4%) responses, "a discussion is a less hostile debate" and "debate," categorized as subjective evaluation. No responses were coded as negative beliefs and 53.8% were coded as a positive belief about "discuss" including, "to talk about an idea to better explain it," "a chance to talk about things in depth," and "the act of very calmly talking about a topic."

Females without argumentativeness training largely responded to the concept "discuss" as a means of learning with 46.2% of their 26 responses being categorized as such. Some of the responses categorized as learning include "communication back and forth sharing ideas and opinions," "talk through something with no intent to persuade but rather inform," "to discuss is to converse about something in an informational fashion," and "people stating their opinions on a subject." A further 42.3% of the responses were

coded as activity/process including, "talking about an issue or an argument," "two people talking with not necessarily different views but talking about them," and "to talk about something." About 11.5% were categorized as subjective evaluation and included "to use words" and "probably not an argument." No responses were coded as negative beliefs and 38.5% were coded as positive, including "calming talking about a subject," "talk over logically," and "communication back and forth sharing ideas and opinions."

Those with argumentativeness training gave three responses. Two, "for people to calmly talk about a certain topic," and "talk," were categorized as activity/process. One, "talking about something with someone where ideas are exchanged," was categorized as learning. No responses were categorized as negative and 66.6% were coded as a positive belief about "discuss" including, "Talking about something with someone where ideas are exchanged" and "for people to calmly talk about a certain topic."

Discussion

It is clear that the terms "argue" and "argument" are often seen in a negative light as referring to conflict and/or hostility. Since conflict is often conceptualized as a negative activity in our culture (Pearce & Littlejohn, 1997), this lends further support to the idea that such terminology in the argumentativeness scale may be creating social desirability bias. Respondents may not wish to admit to enjoying conflict and it is likely that they don't want to admit to enjoying an activity that is perceived as a form of hostility.

Only the terms "discuss" and "debate" did not have any responses that were categorized as a negative belief structure about the concept. Given that "discuss" had no negative connotations it is likely that "discussion about controversial issues" only had

responses categorized as negative belief structures due to the inclusion of the phrase “about controversial issues.” While the results of this study make it tempting to leave out the phrase “about controversial issues” when modifying the argumentativeness scale, using the terms “discuss” or “discussion” without the accompanying phrase “about controversial issues” would change the meaning of the statements on the argumentativeness scale.

The term “discuss” had the highest percentage of responses categorized as a positive belief structure. This indicates that most participants either perceived the term as describing a positive action or at the very least a neutral action that could become positive. This perception of the term could make it a viable substitute for “argue” in the argumentativeness scale.

Sex and training only had a limited impact on the perceptions of the stimulus words. All participants saw “argue” and “argument” as being associated with a fight but those with training did not have quite as many responses coded as negative though this may be due to the limited number of participants who self-identified as having argumentativeness training. It is also possible that by allowing participants to use their own words, the measurements of perceptions of the words was downplayed and therefore the difference in perception is not as noticeable.

Limitations

The coders for this study came from two very different backgrounds both culturally and academically. This could account for the low kappas for the initial coding. Furthermore, one of the coders does not speak English as his primary language. There is a possibility that the coder had some difficulties interpreting some of the phrases used in

terms of the respondents' original meanings. An example of this occurred during a meeting to go over disagreements with both coders in order to arrive at mutual agreement. The phrase "not seeing eye-to-eye" was interpreted literally by one coder to mean not making eye contact as opposed to the more common interpretation of not agreeing.

Another limitation to this study is the words used by participants to describe a "discussion about controversial issues." For the most part, synonyms given by participants were "discuss," "argue," "argument," and "debate," all of which were words already provided to participants in later questions. It is possible that despite being instructed to answer the questions in order and not go back to previous questions, respondents used later questions to provide words used to describe a "discussion about controversial issues" and failed to generate their own ideas.

A final limitation is that participants were asked to self-identify as possessing argumentativeness training. They were not asked what time of training. It is possible that some saw speech training as argumentativeness training when they received little to no instruction on the formulation of arguments.

Chapter Three

Study 2

The goal of the second study was to generate a quantitative measurement of the meaning of the concepts associated with “argue.” Specifically, the concern is with how “favorable” a concept is, if it is seen as strong or weak, whether respondents consider it to take place mainly in the public or private sphere, and if they think the concept focuses on issues or a person(s). This is important because study one generated qualitative data but did not give a method of measuring participants’ perceptions of the terms. In order to make an educated decision about which words to substitute, it is important that we have both descriptions of what participants think about key terms and a way of measuring their perceptions.

To assess connotations, the second study used semantic differential scales (Osgood, Suci, & Tannenbaum, 1957) measuring concepts across four dimensions. The concepts for the scales were comprised of the most frequently used terms from study one to describe “a discussion about controversial issues”. It is important to keep in mind that a focus on controversial issues is what the original researchers had in mind when constructing the argumentativeness scale (Infatne & Rancer, 1982). The concepts were rated on four dimensions using adjective pairs. Two of the dimensions to be measured, evaluative and potency, were created by Osgood et al. (1957) and two of the dimensions, sphere and locus, were created specifically for this study.

The evaluative dimension is concerned with how favorable a concept is. Basically, it measures whether participants view a concept as being good or bad. This is important because knowing if a concept is perceived favorably or unfavorably can give

insight as to whether the concept is socially desirable.

The potency dimension measures how strong a concept is. For example, the term “argument” may be seen as very strong indicating it is forceful. The term “debate” may be seen as relatively weak and thus is probably seen as less confrontational.

The sphere dimension, for purposes of this study, measures an individual’s conceptualization of where a concept falls between the public and private spheres. This is important because if the concepts are strongly associated with the public sphere then some individuals may have a negative reaction to “discussions about controversial issues” taking place in public. This may impact scores on the argumentativeness scale. It is also possible that an individual may be more nervous about speaking in a public situation. If they perceive the scale as referring to such a situation they may under report their tendency to engage in argumentative situations in private.

The locus dimension measures an individual’s conceptualization of where a concept falls between person focused, which is associated with verbal aggression, or issue focused, which is associated with argumentativeness. This dimension was created for this study to ensure that word substitutions for the modified argumentativeness scale in study three call to mind behavior associated with argumentativeness and not verbal aggression. This will help to clarify some of the confusion participants may have regarding wording on the argumentativeness scale. Keeping these dimensions in mind, the following research questions are posed.

Overall study two is an attempt to measure participants’ perceptions of key words that may be used in the creation of a modified argumentativeness scale for study three. The data generated by study two will be combined with the qualitative data generated by

study one to select which words will be used in the creation of the modified argumentativeness scale for study three.

RQ6: Which concepts are seen as most issue focused?

RQ7: Which concepts are seen as the least negative?

RQ8: Which concepts are seen as the most neutral in terms of taking place in a public setting or private setting?

RQ9: Which concepts are seen as the most potent?

Methods

Sample. Participants were drawn from sections of introductory level communication classes at a medium sized Midwestern university. This resulted in a sample size of 154 of which 53 were males (34.4%) and 96 were females (62.3%) (3% missing). About 41% ($n = 63$) of the participants had experienced some form of argumentativeness training in the past either in a class or as a member of a forensics or debate team.

Materials. Seven concepts related to “argue” were identified and used. The concepts used were: “debate,” “argue,” “discuss,” “dispute,” “discussion,” and “argument.” These concepts were selected as they were the most commonly used words to describe “a discussion about controversial issues” in the first study. Participants rated the seven concepts using semantic differential scales (Osgood, Suci, & Tannenbaum, 1957), one of the most widely used scales for the measurement of meaning (Pedhazur & Schmelkin, 1991). A copy of the instrument can be found in Appendix C. Each concept and the associated semantic differential scale appeared on separate pages to reduce confusion.

Osgood et al. (1957) found that there were typically three dimensions used to measure the semantic space of a concept: evaluative, activity, and potency. The scales used here included bipolar adjective pairs to measure four theoretical dimensions: evaluative, potency, sphere, and locus. The evaluative and potency dimensions came directly from the work of Osgood et al. (1957), while the activity dimension was not relevant and not used. The sphere and locus dimensions were created specifically for this study to measure perceptions of the concepts important for possible substitute terms for the argumentativeness scale. This study was the pilot study for the two dimensions and as the adjective pairs did not factor out consistently they are deemed unreliable to use for these dimensions.

The evaluative dimension was reflected in the adjective pairs “good-bad,” “pleasurable-painful,” and “positive-negative.” These pairs were intended to measure how favorable a concept is to the participants (Osgood et al., 1957). The potency dimension was reflected in the adjective pairs “weak-strong,” “yielding-tenacious,” and “humorous-serious.” They were used to measure the power a concept possesses. Both of these dimensions used adjective pairs taken from Osgood et al.’s (1957) original list of adjective pairs.

The sphere dimension was reflected in the bipolar adjective pair “private-public” and was intended to measure the perception of the environment in which the concept takes place, a public environment or a private one. The locus dimension was comprised of the adjective pairs “person focused-issue focused” and was intended to measure the focus of the concept. A concept rated as “person focused” would be more in line with a concept associated with verbal aggression as it focuses on personal attacks (Infante &

Wigley, 1986). A concept rated as "issue focused" would be more in line with a concept associated with argumentativeness as the focus is on the issue (Infante & Rancer, 1982). Both of these adjective pairs were created by the researcher for this study.

Researchers have noted that while the evaluative and potency dimensions may be the most common used in semantic differential scales, it should not be assumed that all concepts can be measured by such dimensions (Fletcher, 1972; Pedhazur & Schmelkin, 1991; Sharpe & Anderson, 1972; Tucker, 1971). Instead, each concept and its adjective pairs should be subjected to a factor analysis using a varimax rotation (Sharpe & Anderson, 1972). This factor analysis can lead to the discovery of dimensions other than evaluative, activity, and potency that account for the variance in responses to a concept because such an analysis may show no common dimensions between the various concepts (Tucker, 1971), and comparisons between concepts using dimensional scores when there are no common dimensions would be erroneous.

Procedures. The research was conducted in a classroom setting. Participants received the packet containing the informed consent form, cover page with directions on how to complete the semantic differential scales, the concepts with scales, and a page of questions pertaining to demographics. A copy of this instrument can be found in Appendix C.

The researcher explained the purpose of the study, went over the consent form, and directed participants on how to complete the instrument. The administration took about 15-20 minutes.

Results

A factor analysis using a varimax rotation was performed for each of the seven

concepts. The factor analyses showed very few common dimensions between concepts when taking into account the study participants as whole. Responses were divided based upon the classifications of males with argumentativeness training, males without argumentativeness training, females with argumentativeness training, and females without argumentativeness training. When examining the concepts based on subgroupings there were still very few common dimensions for the same concept across the different groups. This demonstrates that both sex and argumentativeness training play a role in the connotations attached to the concepts. However, because the factor analysis failed to produce common dimensions, the mean scores for adjective pairs were examined instead of factor dimensions.

In an effort to ensure that possible word substitutions for the argumentativeness scale focused on argumentativeness and not verbal aggression, RQ6 asks, "which concepts are seen as most issue focused?" "Debate" was found to be the most issue focused when the participants' responses were examined as a whole. When examining only males, "debate" was still seen as the most issue focused. This trend continued when only females were examined and when those with argumentativeness training were examined. For a complete breakdown of means and standard deviations see Tables 1 through 4. The results are broken down by all participants, females only, males only, and those with argumentativeness training.

Table 1

Means & Standard Deviations for All Participants

Concepts	Adjective Pairs							
	Bad	Painful	Negative	Strong	Tenacious	Serious	Private	Issue
Debate	2.61 (1.46)	3.68 (1.33)	2.84 (1.48)	5.36 (1.35)	4.32 (1.29)	5.04 (1.69)	2.73 (1.50)	5.04 (2.73)
Argue	4.38 (1.91)	4.90 (1.50)	4.88 (1.52)	4.47 (1.54)	4.39 (1.54)	5.35 (1.56)	4.58 (1.64)	3.95 (1.71)
Discuss	1.91 (1.35)	3.23 (1.37)	2.58 (1.34)	4.69 (1.39)	4.08 (1.28)	4.41 (1.38)	3.71 (1.60)	4.32 (1.52)
Dispute	4.58 (1.86)	4.75 (1.44)	4.46 (1.69)	4.33 (1.51)	4.05 (1.49)	4.95 (1.58)	4.33 (1.61)	3.81 (1.50)
Discussion	2.03 (1.35)	3.19 (1.53)	2.78 (1.44)	4.77 (1.42)	3.99 (1.40)	4.17 (1.36)	3.72 (1.48)	4.02 (1.52)
Argument	4.71 (1.97)	4.85 (1.55)	4.60 (1.67)	4.60 (1.60)	4.16 (1.52)	5.07 (1.63)	4.53 (1.62)	4.03 (1.57)

Note. ($N = 154$) The numbers in parentheses are the standard deviations.

Table 2

Means & Standard Deviations for Male Participants

Concepts	Adjective Pairs							
	Bad	Painful	Negative	Strong	Tenacious	Serious	Private	Issue
Debate	2.58 (1.57)	3.91 (1.29)	2.83 (1.58)	5.26 (1.44)	4.32 (1.30)	4.77 (1.74)	2.81 (1.49)	5.09 (1.87)
Argue	3.98 (1.98)	4.72 (1.47)	4.57 (1.44)	4.32 (1.41)	4.30 (1.38)	5.02 (1.58)	4.43 (1.60)	4.19 (1.57)
Discuss	2.28 (1.52)	3.43 (1.41)	2.91 (1.26)	4.51 (1.22)	4.06 (1.25)	3.51 (1.25)	3.53 (1.50)	4.17 (1.34)
Dispute	4.47 (1.85)	4.57 (1.26)	4.32 (1.66)	4.21 (1.47)	4.36 (1.37)	4.66 (1.63)	4.17 (1.50)	3.85 (1.23)
Discussion	2.15 (1.34)	3.45 (1.41)	2.87 (1.44)	4.53 (1.44)	3.92 (1.36)	4.11 (1.27)	3.62 (1.33)	3.87 (1.52)
Argument	4.36 (2.01)	4.70 (1.48)	4.23 (1.67)	4.66 (1.54)	4.00 (1.59)	4.75 (1.60)	4.72 (1.62)	4.02 (1.47)

Note. ($N = 53$) The numbers in parentheses are the standard deviations.

Table 3

Means & Standard Deviations for Female Participants

Concepts	Adjective Pairs							
	Bad	Painful	Negative	Strong	Tenacious	Serious	Private	Issue
Debate	2.60 (1.43)	3.49 (1.32)	2.89 (1.45)	5.42 (1.29)	4.31 (1.31)	5.21 (1.65)	2.67 (1.51)	5.06 (1.90)
Argue	4.57 (1.90)	5.03 (1.52)	5.06 (1.56)	4.56 (1.62)	4.48 (1.60)	5.55 (1.56)	4.65 (1.69)	3.83 (1.79)
Discuss	1.65 (1.14)	3.06 (1.34)	2.32 (1.29)	4.82 (1.48)	4.13 (1.29)	4.40 (1.42)	3.78 (1.66)	4.41 (1.60)
Dispute	4.68 (1.91)	4.89 (1.54)	4.56 (1.69)	4.40 (1.56)	3.91 (1.55)	5.14 (1.54)	4.45 (1.66)	3.80 (1.64)
Discussion	1.86 (1.26)	3.04 (1.61)	2.67 (1.42)	4.93 (1.41)	3.97 (1.41)	4.21 (1.43)	3.76 (1.57)	4.10 (1.536)
Argument	4.97 (1.92)	5.02 (1.55)	4.81 (1.68)	4.60 (1.65)	4.22 (1.49)	5.33 (1.58)	4.45 (1.65)	4.03 (1.66)

Note. ($N = 96$) The numbers in parentheses are the standard deviations.

Table 4

Means & Standard Deviations for Participants with Argumentativeness Training (N = 63)

Concepts	Adjective Pairs							
	Bad	Painful	Negative	Strong	Tenacious	Serious	Private	Issue
Debate	2.40(1.30)	3.40(1.33)	2.71(1.52)	5.05(1.30)	4.08(1.38)	5.08(1.64)	2.97(1.61)	5.17(1.91)
Argue	4.67(1.63)	4.84(1.52)	5.05(1.45)	4.49(1.54)	4.46(1.61)	5.33(1.64)	4.56(1.57)	4.02(1.78)
Discuss	1.98(1.48)	3.25(1.28)	2.63(1.29)	4.51(1.35)	4.11(1.23)	4.21(1.18)	3.83(1.58)	4.33(1.47)
Dispute	4.62(1.76)	4.65(1.42)	4.40(1.65)	4.30(1.30)	3.78(1.37)	5.03(1.43)	4.21(1.39)	3.92(1.56)
Discussion	2.25(1.43)	3.11(1.57)	3.06(1.45)	4.46(1.31)	3.81(1.22)	4.14(1.09)	4.03(1.30)	3.89(1.39)
Argument	4.89(1.87)	4.73(1.64)	4.75(1.58)	4.37(1.45)	4.08(1.42)	4.97(1.66)	4.33(1.31)	4.30(1.56)

Note. The numbers in parentheses are the standard deviations, the numbers before the parentheses are the means.

In order to answer RQ7 “Which concepts are seen as the least negative?”, the adjective pairs measuring the evaluative dimension (“good-bad,” “pleasurable-painful,” and “positive-negative”) were compared. “Discussion” and “discuss” were consistently rated as the most positive concepts and reflected the highest mean scores. This held true for the entire sample as well as the subgroups of participants broken down by sex and those with argumentativeness training. “Argue” and “argument” were consistently rated most negatively and reflected the lowest mean scores out of the concepts.

RQ8 asks, “Which concepts are seen as the most neutral in terms of taking place in a public setting or private setting?” The mean scores demonstrate that “Debate” was rated as the most public. “Discuss” and “discussion” were rated most neutral differing by only 0.21 points from complete neutral for “discuss” and by 0.27 points for “discussion.” This held true across all groupings.

RQ9 asks, “Which concepts are seen as the most potent?” To answer this question, the adjective pairs comprising the potency dimension (“strong-weak,” “tenacious-yielding,” and “serious-humorous”) were compared. “Argue” consistently came up as the most potent concept on two of three adjective pairs (“tenacious-yielding and serious-humorous”) for all participants, female participants, and participants with argumentativeness training. For all participants, males, females, and those with argumentativeness training “debate” was the most potent when measured by the “strong-weak” adjective pair. For males only, “dispute” was the most potent when measured by the “tenacious-yielding” adjective pair.

Discussion

The purpose of Study 2 was to examine the connotative meanings associated with

terms obtained through the qualitative investigation of synonyms for “a discussion about controversial issues” in Study 1. This is important because in order to find terms for use in the modified argumentativeness scale in study three there must be a way to compare participants’ perceptions of possible word choices. The results of Study 2 suggest that “Discussion” and “discuss” appear to be the most suitable terms to substitute on the argumentativeness scale because they have the least negative connotations attached to them when the means for the adjective pairs comprising the evaluative dimension were examined. Additionally, they were seen as most place neutral in terms of taking place in a private or public setting.

While “debate” was rated higher on the issue focused dimension, it was also rated as being more public. This likely indicates a difficulty in viewing a debate as anything other than a serious, public affair similar to a moderated debate. This suggests the term would not be suitable to substitute for “argue” in the argumentativeness scale.

Finally, “dispute” can be discounted from use as it was shown to have very negative connotations when the evaluative dimension was examined. “Dispute” was rated the closest out of all other concepts to matching the ratings of “argue” and “argument” on the evaluative dimension, demonstrating that participants see “dispute” as almost as negative a concept as “argue” and “argument.”

The results of the factor analysis suggest the connotations associated with the seven concepts (“debate,” “argue,” “discuss,” “dispute,” “discussion,” and “argument”) are not universally shared. Previous experience with argumentation training and participant sex affected the meanings associated with the seven concepts. Of the seven, “discuss” and “discussion” seem the most suited for substitution with the

argumentativeness scale as they are issue focused, rated as more favorable than “argue” and “argument” and are not seen in the same manner that a formal debate is.

Limitations

The biggest limitation of this study was the adjective pairs comprising the dimensions which did not factor out cleanly using a varimax rotation. In no instance did the same dimensions appear for each concept. Often times the dimensions accounting for the variance in scores were comprised of adjective pairs from two or more of the dimensions that were theorized to appear. The adjective pairs comprising the dimensions did not load cleanly or consistently across the seven concepts. Furthermore they did not load cleanly or consistently within concepts when compared across the different groups. Since no concepts shared all the same dimensions comparisons of the dimensions across concepts using statistical tests as originally proposed was not possible.

Chapter Four

Study 3

The third study used the results of the first two studies to make modifications to the argumentativeness scale to see if the scores on the scale change based on the terminology used in the scale. The results of studies one and two both demonstrated that people see the term debate in a formalized public manner and so it was unsuitable for substitution. Furthermore while “discuss” and “discussion” were seen as favorable concepts in study two it is essential that the words “controversial issues” be included to emphasize that there is potential for conflict in these discussions and that there are opposing viewpoints. The following hypotheses guide the third study:

H1: The mean score on the modified argumentativeness scale will be higher than the mean score on the argumentativeness scale.

Given that studies one and two were used to discover the perceptions participants have about terms associated with a “conversation about controversial issues,” the modified scale should contain more favorable phrasing. This increase in the desirability of the phrasing should result in an overall increase in the mean scores, demonstrating people are more willing to report they engage in this activity.

H2: Persons who score high in social desirability bias will have greater mean differences in scores between the original argumentativeness scale and the modified argumentativeness scale than persons who do not score as high in social desirability bias.

If social desirability impacts the scores that those scoring high in social desirability have on the argumentativeness scale (Chen, 1994), then rephrasing items on

the scale should result in an interpretation of the modified scale as being higher in desirability than the previous scale. Since persons high in social desirability tend to claim that they have socially desirable traits (Crowne & Marlow, 1964; Strahan & Gerbasi, 1972) they should respond higher on the modified scale than those that are low in social desirability. Those that are low in social desirability should not have their scores influenced as much by the changes in item wording.

H3: Females will score higher on the social desirability scale than males.

If, in fact, females have higher social desirability needs as suggested by Nicotera (1996), then it follows that they should score higher on the scale than males. If they do not, then Chen's 1994 study may be invalidated as it contained a very large ratio of women to men (109 females and 59 males).

H4: Females will have greater mean differences in scores between the two versions of the argumentativeness scale than males.

If females are in fact higher in social desirability then they should have a greater mean difference in their scores than males who should score lower on the social desirability scale. Given that the rephrased items may carry a greater connotation of an argument in the public sphere, women should also have greater increased scores on the argumentativeness scale than men because women display the biggest increase in scores when an argument takes place in the public sphere versus the private sphere (Johnson et al., 2007).

Methods

Sample. Participants were drawn from sections of introductory level communication classes at a medium sized Midwestern university. Of the 508 participants

45.1% ($n = 229$) were male and 54.7% ($n = 229$) were female (.2% missing).

Materials. Subjects were given an instrument containing a copy of the original argumentativeness scale (Infante & Rancer, 1982), a copy of Strahan and Gerbasi's (1972) shortened social desirability scale, and a copy of the modified version of the argumentativeness scale in which all instances of "argument" and "argue" were replaced with "discussion about controversial issues" and "arguing" was replaced with "discussing controversial issues" based on the results of the first two studies. The Strahan and Gerbasi (1972) shortened social desirability scale served to measure social desirability. The shortened form consists of 10 statements to which subjects respond true or false and was chosen to prevent testing fatigue. This scale has been shown to be the most reliable amongst student samples (Thompson & Phua, 2005). For grouping purposes a person was considered as being high in social desirability if they scored 7 or higher on the social desirability scale as per Strahan and Gerbasi's (1972) instructions.

Social desirability bias is a concern because it may result in inaccurate self reporting as subjects may report in ways contrary to their actual behavior or desires in order to present themselves in a more favorable light (Chen, 1994; Crowne & Marlowe, 1964; Nicotera, 1996; Nicotera et. al. 1990; Smith & Ellingson, 2002; Strahan & Gerbasi, 1972). This bias can seriously skew the results of any test that relies on self reporting.

Chen (1994) showed that individuals scoring high in social desirability scored significantly lower on the argumentativeness scale than individuals scoring low on the social desirability scale. Nicotera (1996) likewise found that individuals rating low on argumentativeness judged items on the scale as being low in social desirability.

Therefore it is important to measure social desirability bias for this study.

The scales were administered as one instrument due to time constraints. Copies of the measures can be found in Appendices A, D, & E.

Procedures. Participants completed the research instrument in a classroom setting. The researcher explained the purpose of the study, reviewed the consent form and directed participants on how to complete the instrument. The administration took about 15-20 minutes.

Results

Seven different groupings of the participants were used to compare scores on the original argumentativeness scale and the modified scale. These groupings were used as past research has shown that social desirability bias and sex can affect scores on the argumentativeness scale (Chen, 1994; Nicotera, 1996). The following groups were used: all respondents, males only, females only, males scoring high in social desirability bias, females scoring high in social desirability bias, all respondents not scoring high in social desirability bias, and respondents scoring high in social desirability bias. These seven groupings were then used to perform tests of the hypotheses.

H1 proposed that the mean score on the modified argumentativeness scale will be higher than the mean score on the argumentativeness scale. A paired t-test was used to test H1 and revealed that people do in fact tend to score higher on the modified argumentativeness scale ($M = 4.26$, $SD = 11.17$) than the original scale ($M = 2.63$, $SD = 10.66$). This supports the idea that people respond differently based on the language choice between the original scale and the modified one ($t(507) = -4.64$, $p < .01$). The mean increase was 1.63 points with a standard deviation of 7.94 points. The results

support H1.

The responses of two groups were used to address H2 which predicted that persons who score high in social desirability bias will have greater mean differences in scores between the original argumentativeness scale and the modified argumentativeness scale than persons who do not score as high in social desirability bias. A paired t-test was used to test the hypothesis. The results indicated that the difference in scores between the two scales ($x = 1.96$, $SD = 12.26$) for those scoring high in social desirability bias ($n = 48$) was higher than the difference in scores between the two scales ($x = 1.6$, $SD = 7.36$) for those that did not score as high in social desirability bias ($n = 460$). The difference in scores between the two scales was significant for those scoring low in social desirability bias ($t(459) = -4.66$, $p < .001$). The difference in scores was not significant for those scoring high in social desirability bias ($t(47) = -1.11$, $p = .27$). This finding does not support H2: Persons that score as high in social desirability bias will have greater mean differences in scores between the original argumentativeness scale and the modified argumentativeness scale than persons that do not score as high in social desirability bias.

H3 states that females will score higher on the social desirability scale than males. An independent t-test revealed that males ($M = 3.99$, $SD = 1.80$) and females ($M = 4.02$, $SD = 1.82$) did have a very small difference in scores on the social desirability scale but the difference was not significant ($t(505) = .21$, $p = .83$). This finding indicates that these males and females had similar levels of social desirability bias and failed to support H3.

H4 states that females will have greater mean differences in scores between the two versions of the argumentativeness scale than males. A paired t-test revealed that

while females have a larger mean difference in scores on the two scales ($M = 2.78$, $SD = 8.03$) than males ($M = .18$, $SD = 7.53$), the difference in scores for males between the two scales ($t(228) = -.35$, $p = .73$) was not statistically significant. The difference for females ($t(277) = -5.761$, $p < .001$) was statistically significant. This lends support to H4: Females will have greater mean differences in scores between the two versions of the argumentativeness scale than males.

Discussion

People did tend to score higher on the modified argumentativeness scale. However, the mean increase was rather small ($M = 1.631$, $SD = 7.94$). This shows that people do perceive "argument" and its derived words as being different from "discussion about controversial issues" and "discuss controversial issues." While this study was unable to demonstrate that social desirability bias alone affected the scores, it is interesting to note that the largest difference in mean scores between the two scales ($M = 3.721$, $SD = 10.571$) came from females scoring high in social desirability bias ($t(28) = -1.90$, $p < .10$).

Females had a higher mean difference between scales ($M = 2.78$, $SD = 8.03$) than men ($M = .18$, $SD = 7.53$) indicating that sex is a factor in scores. Females scored lower on the original argumentativeness scale ($M = .31$, $SD = 10.22$) than males ($M = 5.53$, $SD = 10.45$) ($t(505) = -5.66$, $p < .001$). Females also scored lower on the modified argumentativeness scale ($m = 3.09$, $SD = 11.21$) than males ($m = 5.70$, $SD = 10.99$) ($t(505) = -2.63$, $p < .01$) but not by as much. This indicates that the difference in perception of phrasing is greater for females than males. This is despite this study showing no significant difference in social desirability bias between males and females.

It may be argued that women score lower on the original scale due to the way they are socialized to think about an argument. If women are taught to avoid confrontation, it is possible that the substitution of "discussion about controversial issues" and "discuss controversial issues" moderated the perception of the statements to the point that they were no longer perceived as pertaining to conflict or confrontation. This would be in line with Nicotera's (1996) suggestions that women avoid arguments due to the possible relational damage. It may be that changing the phrasing alters the estimation of potential relational damage. Additionally, the continued emphasis on "controversial issues" likely focuses participants' perceptions of the activity on the issues and not personal attacks which are more relationally damaging (Infante & Rancer, 1982; Infante & Wigley, 1986).

Something else to consider is the social desirability scale itself. The original scale was constructed in 1964 (Crowne & Marlowe, 1964) and Strahan and Gerbasi's (1972) shortened social desirability scale does not make alterations to the wording of the original scale, it only uses less items. It is entirely possible that what is considered social desirable behavior has changed since the scale was constructed and that it no longer accurately measures social desirability bias.

Finally, the small change in scores on the modified scale versus the original scale may be due to the assurances of anonymity given by the researcher. It may be argued that when the subject is assured that they will not be linked to their responses they may be more willing to answer truthfully. Should participants not be assured anonymity, they may have answered differently on the original scale. This is something to keep in mind in situations where the participants know the results of the scale will be linked back to them and acted upon as may be possible in a job situation.

Limitations

The most glaring limitation of this study was the limited number of people who scored as high in social desirability bias ($n = 48$). This makes it difficult to say that the results pertaining to those that scored high in social desirability bias are reliable. This may also account for the difference in scores for those scoring high in social desirability bias not being statistically significant.

While this study did not find social desirability bias to be a factor in the difference in scores, it is possible that a study with a greater number of participants, specifically those scoring high in social desirability bias, could demonstrate that social desirability bias does result in a significant difference in scores between the two scales.

A further limitation of this study lies in the decision to divide participants according to sex and not gender communication styles. While this study found significant differences in scores based on sex, it is possible that gender communication styles and not sex is what actually accounts for the difference in scores.

Finally, the use of the social desirability bias scale may be a limitation in this study. While the Strahan and Gerbasi (1972) scale has been evaluated as the most reliable social desirability bias scale for students (Thompson & Phua, 2005), it may not be valid in measuring social desirability bias today.

Chapter 5

Discussion

These studies examined possible alternative word choices for “argue” and “argument” for substitution in the argumentativeness scale. The first study used open-ended questions to elicit responses from participants that show how they viewed the words “debate,” “argue,” “discuss,” “argument” and “discussion about controversial issues.” The second study used the semantic differential scale in an effort to generate quantitative data related to participants’ perceptions of possible substitute terms including “debate,” “discuss,” “dispute,” and “discussion” as well as “argue” and “argument.”

The third study used the findings of the first two studies and substituted “discuss controversial issues” for “argue” and “discussion about controversial issues” for “argument” within the argumentativeness scale. T-tests revealed that the substitution of terms does significantly impact how some participants responded to the scale. Due to a limited number of respondents that scored high in social desirability bias category, it is not possible to say whether the underlying cause for the change in the scores is due to social desirability bias or some other factor not included in this investigation.

Taken as a whole, the first two studies reveal that there is a definite perception that the terms “argue” and “argument” refer to a negative concept. Furthermore, while there are many words that could be used to substitute for “argue” and “argument” the necessity of using words that do not call to mind name-calling or fights limits the choices.

While using the term “debate” and its derivatives may seem like a viable substitute for “argue” and its derivatives, it would seem that participants consistently found the term “debate” to be referring to a public affair, likely a moderated one similar

to a presidential debate or formalized competition. For this reason "debate" is not seen as a viable term for substitution within the argumentativeness scale.

The terms "discuss" and "discussion" are better suited for substitution within the argumentativeness scale. However "discuss" and "discussion" do not imply conflict in and of themselves. It is possible to have a discussion in which there is no disagreement and the willingness to engage in a conversation in which there is disagreement is what the argumentativeness scale is focused on. Therefore the addition of "about controversial issues" was necessary.

Implications

Conflict is a sensitive subject with negative connotations for many individuals. Researchers should be aware of this bias when constructing or administering scales based on the self-reporting of such activities. While the increased scores on the modified argumentativeness scale do indicate people are more willing to report they are likely to enjoy or engage in discussion about controversial issues than they may report on the argumentativeness scale, the increase is small and should not be taken as a reason to use the modified scale without extensive testing for validity and reliability. The best course of action may be the imperative by Nicotera (1996) to remind participants that the scale is concerned with controversial issues. It may be wise to emphasize that the scale is discussing arguments in terms of those issues and not in terms of name-calling or fighting.

This research serves as a warning to researchers that when constructing scales, extensive effort should be devoted to choosing words that are as clear in meaning as possible. This will reduce any confusion on the part of participants and should lead to

obtaining a clearer understanding of what is being studied. During the initial testing phases of a new scale, a social desirability bias scale should be administered with it to see if social desirability bias accounts for variance in the scores.

Additionally, existing scales should be examined periodically for the terminology used as it is important to keep in mind that the connotations associated with words often change over time. This could render a scale invalid for what it is intended to measure.

Directions for Future Research

Future research could focus on creating a reliable semantic differential scale to measure concepts related to the argumentativeness scale. This may require the changing, subtracting, or adding of adjective pairs until the same dimensions reliably factor out across all concepts. The locus and sphere dimensions require additional adjective pairs to meet the general guideline of three adjective pairs per dimension (Pedhazur & Schmelkin, 1991). Doing so could give a clearer understanding of the perceptions individuals have regarding words associated with conflict behavior and the behavior itself.

The most compelling area for future research related to the third study is a similar study with more participants. The purpose would be to obtain a larger sample of participants who score high in social desirability bias. Collecting a sample with more similar proportions of participants both low and high in social desirability bias would permit greater confidence in the results of the hypothesis testing. Additionally, the modified argumentativeness instrument should be investigated further to provide evidence of its reliability and validity.

A further area for future research should include an instrument that measures

gender communication styles. Such a study could provide insight into how socialization impacts a person's argumentativeness levels. Doing so would allow researchers a greater understanding of what affects a person's conflict style.

Conclusion

Participants in general had a negative perception of the words "argue" and "argument," two commonly occurring words in the argumentativeness scale. This perception may impact the scores of individuals responding to the argumentativeness scale due to social desirability bias. While the scores on the scale increased by a small amount with the modified scale, it should not be substituted for the argumentativeness scale without extensive further testing for reliability and validity. It is important to keep in mind the various factors that may influence a person's communication style and that willingness to engage in a discussion about controversial issues may not be the only factor affecting scores on the argumentativeness scale.

Finally, it is important to remember that scales should be periodically revisited. Over the course of time, the connotations attached to language used in the scale may change. Other factors in society may change as well and for this reason it is important to revisit scales for validity and reliability as well as the content of the scales themselves.

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APPENDIX A
Argumentativeness Scale

Instructions

This questionnaire contains statements about arguing controversial issues. Indicate how often each statement is true for you personally by placing the appropriate number in the blank to the left of the statements. If the statement is almost never true for you place a "1" in the blank. If the statement is rarely true for you, place a "2" in the blank. If the statement is occasionally true for you, place a "3" in the blank. If the statement is often true for you, place "4" in the blank. If the statement is almost always true for you, place a "5" in the blank.

- ___ 1. While in an argument, I worry that the person I am arguing with will form a negative impression of me.
- ___ 2. Arguing over controversial issues improves my intelligence.
- ___ 3. I enjoy avoiding arguments.
- ___ 4. I am energetic and enthusiastic when I argue.
- ___ 5. Once I finish an argument, I promise myself that I will not get into another.
- ___ 6. Arguing with a person creates more problems for me than it solves.
- ___ 7. I have a pleasant, good feeling when I win a point in an argument.
- ___ 8. When I finish arguing with someone I feel nervous and upset.
- ___ 9. I enjoy a good argument over a controversial issue.
- ___ 10. I get an unpleasant feeling when I realize I am about to get into an argument.
- ___ 11. I enjoy defending my point of view on an issue.
- ___ 12. I am happy when I keep an argument from happening
- ___ 13. I do not like to miss the opportunity to argue a controversial issue.
- ___ 14. I prefer being with people who rarely disagree with me.
- ___ 15. I consider an argument an exciting intellectual challenge.
- ___ 16. I find myself unable to think of effective points during an argument.
- ___ 17. I feel refreshed and satisfied after an argument on a controversial issue.
- ___ 18. I have the ability to do well in an argument.
- ___ 19. I try to avoid getting into arguments.
- ___ 20. I feel excitement when I expect that a conversation I am in is leading to an argument.

APPENDIX B

Instructions: The following questions ask about your personal

perceptions of words and concepts.

There are no right or wrong answers.

This study is interested in your own personal understanding of the words and concepts. We are not looking for a dictionary definition.

Please include as much information as possible.

1. Are you Male or Female?
2. What words would you use to describe a discussion about controversial issues?
List as many words as you can think of including synonyms and your personal feelings regarding a discussion about controversial issues.

3. What does the word “argue” mean to you?

4. What does the word “argument” mean to you?

5. What does the word “debate” mean to you?

6. What does the word “discuss” mean to you?

7. Last question: Have you taken or are you currently taking an argumentation class?

Appendix C

Instructions

The purpose of this study is to understand how people interpret the meanings of certain concepts by having them judge them against a series of descriptive scales. Please make your judgments on the basis of what these things mean to *you*. On each page of this booklet you will find a different concept to judge and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you use these scales:

- If you feel that the concept at the top of the page is *very closely related* to the left end of the scale, you should fill in circle A on your scantron sheet.
- If you feel that the concept at the top of the page is *very closely related* to the right end of the scale, you should fill in circle G on your scantron sheet.
- If you feel that the concept at the top of the page is *quite closely related* to the left end of the scale but not extremely you should fill in circle B on your scantron sheet.
- If you feel that the concept at the top of the page is *quite closely related* to the right end of the scale you should fill in circle F on your scantron sheet.

- If you feel that the concept at the top of the page is *only slightly related* to the left end of the scale you should fill in circle C on your scantron sheet.
- If you feel that the concept at the top of the page is *only slightly related* to the right end of the scale you should fill in circle E on your scantron sheet.
- If you consider the concept to be *neutral* on the scale, then you should fill in circle D on your scantron sheet.

Sometimes you may feel as though you've had the same item before. This will not be the case, so *do not look back and forth* through the items. Do not try to remember how you checked similar items earlier. Make a separate and independent judgment for each item. Work as quickly and accurately as you can. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items that we want. It is very important that you respond to every item.

Debate

1. Good	A	B	C	D	E	F	G	Bad
2. Painful	A	B	C	D	E	F	G	Pleasurable
3. Positive	A	B	C	D	E	F	G	Negative
4. Weak	A	B	C	D	E	F	G	Strong
5. Tenacious	A	B	C	D	E	F	G	Yielding
6. Humorous	A	B	C	D	E	F	G	Serious
7. Public	A	B	C	D	E	F	G	Private
8. Person Centered	A	B	C	D	E	F	G	Issue

Centered

Argue

9. Good	A	B	C	D	E	F	G	Bad
10. Painful	A	B	C	D	E	F	G	Pleasurable
11. Positive	A	B	C	D	E	F	G	Negative
12. Weak	A	B	C	D	E	F	G	Strong
13. Tenacious	A	B	C	D	E	F	G	Yielding
14. Humorous	A	B	C	D	E	F	G	Serious
15. Public	A	B	C	D	E	F	G	Private
16. Person Centered	A	B	C	D	E	F	G	Issue

Centered

Discuss

17. Good	A	B	C	D	E	F	G	Bad
18. Painful	A	B	C	D	E	F	G	Pleasurable
19. Positive	A	B	C	D	E	F	G	Negative
20. Weak	A	B	C	D	E	F	G	Strong
21. Tenacious	A	B	C	D	E	F	G	Yielding
22. Humorous	A	B	C	D	E	F	G	Serious
23. Public	A	B	C	D	E	F	G	Private
24. Person Centered	A	B	C	D	E	F	G	Issue

Centered

Dispute

25. Good	A	B	C	D	E	F	G	Bad
26. Painful	A	B	C	D	E	F	G	Pleasurable
27. Positive	A	B	C	D	E	F	G	Negative
28. Weak	A	B	C	D	E	F	G	Strong
29. Tenacious	A	B	C	D	E	F	G	Yielding
30. Humorous	A	B	C	D	E	F	G	Serious
31. Public	A	B	C	D	E	F	G	Private
32. Person Centered	A	B	C	D	E	F	G	Issue

Centered

Discussion

33. Good	A	B	C	D	E	F	G	Bad
34. Painful	A	B	C	D	E	F	G	Pleasurable
35. Positive	A	B	C	D	E	F	G	Negative
36. Weak	A	B	C	D	E	F	G	Strong
37. Tenacious	A	B	C	D	E	F	G	Yielding
38. Humorous	A	B	C	D	E	F	G	Serious
39. Public	A	B	C	D	E	F	G	Private
40. Person Centered	A	B	C	D	E	F	G	Issue

Centered

Argument

41. Good	A	B	C	D	E	F	G	Bad
42. Painful	A	B	C	D	E	F	G	Pleasurable
43. Positive	A	B	C	D	E	F	G	Negative
44. Weak	A	B	C	D	E	F	G	Strong
45. Tenacious	A	B	C	D	E	F	G	Yielding
46. Humorous	A	B	C	D	E	F	G	Serious
47. Public	A	B	C	D	E	F	G	Private
48. Person Centered	A	B	C	D	E	F	G	Issue

Centered

49. What is your sex?

A. Male B. Female

50. What is your year in school?

A. Freshman B. Sophomore C. Junior D. Senior

51. Have you been on a debate team?

A. Yes B. No

52. Have you been on a forensics team?

A. Yes B. No

53. Have you taken an argumentation class?

A. Yes B. No

54. Have you had argumentation training?

A. Yes B. No

55. In the **Special Code** section of your scantron sheet fill out your age in the **first** two boxes.

Appendix D

Instructions

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. If the item is true for you, fill out the circle labeled "A". If the statement is false for you, fill out the circle labeled "B".

A=True**B=False**

1. I'm always willing to admit it when I make a mistake.
2. I always try to practice what I preach.
3. I never resent being asked to return a favor.
4. I have never been irked when people expressed ideas very different from my own.
5. I have never deliberately said something that hurt someone's feelings.
6. I like to gossip at times.
7. There have been occasions when I took advantage of someone.
8. I sometimes try to get even rather than forgive and forget.
9. At times I have really insisted on having things my own way.
10. There have been occasions when I felt like smashing things.

Appendix E

Instructions

This questionnaire contains statements about discussing controversial issues. Indicate how often each statement is true for you personally by placing the appropriate number in the blank to the left of the statements. If the statement is almost never true for you place a "1" in the blank. If the statement is rarely true for you, place a "2" in the blank. If the statement is occasionally true for you, place a "3" in the blank. If the statement is often true for you, place "4" in the blank. If the statement is almost always true for you, place a "5" in the blank.

- ___ 1. While in a discussion about controversial issues, I worry that the person I am debating with will form a negative impression of me.
- ___ 2. Discussion over controversial issues improves my intelligence.
- ___ 3. I enjoy avoiding discussions about controversial issues.
- ___ 4. I am energetic and enthusiastic when I discuss controversial issues.
- ___ 5. Once I finish a discussion about controversial issues, I promise myself that I will not get into another.
- ___ 6. Discussing controversial issues with a person creates more problems for me than it solves.
- ___ 7. I have a pleasant, good feeling when I win a point in a discussion about controversial issues.
- ___ 8. When I finish discussing controversial issues with someone I feel nervous and upset.
- ___ 9. I enjoy a good discussion over a controversial issue.
- ___ 10. I get an unpleasant feeling when I realize I am about to get into a discussion about controversial issues.
- ___ 11. I enjoy defending my point of view on an issue.
- ___ 12. I am happy when I keep a discussion about controversial issues from happening
- ___ 13. I do not like to miss the opportunity to discuss a controversial issue.
- ___ 14. I prefer being with people who rarely disagree with me.
- ___ 15. I consider a discussion about controversial issues an exciting intellectual challenge.
- ___ 16. I find myself unable to think of effective points during a discussion about controversial issues.
- ___ 17. I feel refreshed and satisfied after a discussion on a controversial issue.
- ___ 18. I have the ability to do well in a discussion about controversial issues.

___19. I try to avoid getting into discussions about controversial issues.

___20. I feel excitement when I expect that a conversation I am in is leading to a discussion about controversial issues.

Appendix F

IRB Approval

November 28, 2007

Jacob Sweet

Communication Studies

Thank you for submitting the research protocol titled, "Reducing SDB in the Argumentativeness Scale Phase 3" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 11/27/2007, has certified this protocol as Exempt from Further Review. The protocol has been given the IRB number 07-131.

The classification of this protocol as Exempt from Further Review is valid only for the research activities, timeline, and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board

c/o Office of Research and Sponsored Programs

• Telephone: 217-581-8576

Fax: 217-581-7181

Email: eiuirb@www.eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Best, Chairperson

Institutional Review Board

Telephone: 217-581-6412

Email: jbbest@eiu.edu

September 13, 2007

Jacob Sweet

Communication Studies

Thank you for submitting the research protocol titled "Reducing Bias in Argumentativeness Scale Phase 2" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has Approved this research protocol following an Expedited Review procedure. IRB review has determined that the protocol involves no more than minimal risk to subjects and satisfies all of the criteria for approval of research.

This protocol has been given the IRB number 07-078. You may proceed with this study from 9/13/2007 to 9/12/2008. You must submit Form E, Continuation Request, to the IRB by 8/2/2008 if you wish to continue the project beyond the approval expiration date.

This approval is valid only for the research activities, timeline, and subjects described in the above named protocol. IRB policy requires that any changes to this protocol be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board

c/o Office of Research and Sponsored Programs

Telephone: 581-8576

Fax: 217-581-7181

Email: eiuirb@www.eiu.edu

Upon completion of your research project, please submit Form G, Completion of Research Activities, to the IRB, c/o the Office of Research and Sponsored Programs.

Thank you for your assistance, and the best of success with your research.

John Best, Chairperson

Institutional Review Board

Telephone: 581-6412

Email: jbbest@eiu.edu

July 31, 2007

Jacob Sweet

Communication Studies

Thank you for submitting the research protocol titled "Accounting for Connotation in Argumentative Terms" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has Approved this research protocol following an Expedited Review procedure. IRB review has determined that the protocol involves no more than minimal risk to subjects and satisfies all of the criteria for approval of research.

This protocol has been given the IRB number 07-071. You may proceed with this study from 7/27/2007 to 7/26/2008. You must submit Form E, Continuation Request, to the IRB by 6/21/2008 if you wish to continue the project beyond the approval expiration date.

This approval is valid only for the research activities, timeline, and subjects described in the above named protocol. IRB policy requires that any changes to this protocol be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board

c/o Office of Research and Sponsored Programs

Telephone: 581-8576

Fax: 217-581-7181

Email: eiuirb@www.eiu.edu

Upon completion of your research project, please submit Form G, Completion of Research Activities, to the IRB, c/o the Office of Research and Sponsored Programs.

Thank you for your assistance, and the best of success with your research.

John Best, Chairperson

Institutional Review Board

Telephone: 581-6412

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